

ARI Research Note 99-21

**Feedback on 360 Degree Leader AZIMUTH Check Assessment  
Conducted at Fort Clayton, Panama**

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March 1999



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## REPORT DOCUMENTATION PAGE

1. REPORT DATE (dd-mm-yy) March 1999		2. REPORT TYPE Final		3. DATES COVERED (from... to) October 1998-March 1999	
4. TITLE AND SUBTITLE Feedback on 360 Degree Leader AZIMUTH Check Assessment Conducted at Fort Clayton, Panama				5a. CONTRACT OR GRANT NUMBER	
				5b. PROGRAM ELEMENT NUMBER 63007A	
6. AUTHOR(S) Angela I. Karrasch (Kansas State University) and Stanley M. Halpin  (U.S. Army Research Institute)				5c. PROJECT NUMBER A792	
				5d. TASK NUMBER 1141	
				5e. WORK UNIT NUMBER TAS	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences ATTN: TAPC-ARI-RK 5001 Eisenhower Avenue Alexandria, VA 22333-5600				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Avenue Alexandria, VA 22333-5600				10. MONITOR ACRONYM ARI	
				11. MONITOR REPORT NUMBER Research Note 99-21	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES Angela I. Karrasch is a Consortium Research Fellow with the Fort Leavenworth Research Unit, U.S. Army Research Institute					
14. ABSTRACT (Maximum 200 words):  This report documents military and civilian leaders' reactions to a multi-rater assessment of their leadership behaviors. The 80 targeted leaders were commissioned and non-commission military officers, and GS-9 to GS14 civilian leaders at Fort Clayton, Panama. After completing the Leader Azimuth Check and receiving feedback, they were asked to complete a survey designed to assess 1) perceptions of trust and the fairness in the multi-rater process, 2) reported understanding of the multi-rater process, 3) beliefs about the accuracy and appropriateness of the sources of feedback and 4) self-efficacy and intentions for change in leadership behaviors. An overview of the responses to the survey are recorded in this report. Subordinates were overwhelmingly viewed as the most valuable source of feedback. Eighty three percent reported that they would use their feedback to monitor and develop their leadership. Motivation to change leadership behavior was best predicted by the extent to which leaders believed the feedback they received was new information. Trust in the confidentiality of the multi-rater process was high, as was the reported understanding in the purpose and methods of the 360. Perceptions of fairness and satisfaction were moderate to high. Perceptions of fairness and accuracy predicted satisfaction with the multi-rater process. Other predictors are mentioned in the report. Implications and recommendations are provided.					
15. SUBJECT TERMS Leader Azimuth Check, multi-rater assessment, multi-rater process					
SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT  Unlimited	20. NUMBER OF PAGES  31	21. RESPONSIBLE PERSON (Name and Telephone Number) Angela I. Karrasch (913) 684-9753
16. REPORT Unclassified	17. ABSTRACT Unclassified	18. THIS PAGE Unclassified			

# Feedback on a 360 degree Leader AZIMUTH Check assessment conducted at Fort Clayton, Panama

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# Feedback on a 360 degree Leader AZIMUTH Check assessment conducted at Fort Clayton, Panama

## Introduction

In September of 1998, the Quality Improvement Office of the Theater Support Brigade at Fort Clayton, Panama first contacted the U.S. Army Research Institute at Fort Leavenworth, KS requesting information pertaining to the Leader Azimuth Check instrument. This instrument is based on Army leadership doctrine and is designed to assess leadership behaviors from the perspective of self, subordinates, peers and superiors (See Appendix A). The Quality Improvement Office under Colonel Richard Thomas also requested assistance in the processing and interpretation of 360 degree feedback assessment for their military and civilian employees. The U.S. Army Research Institute responded by agreeing to process data from the Leader Azimuth Check instrument and to provide the interpretation and counseling of the feedback to the leaders who had been selected for assessment.

ARI mailed the surveys to Fort Clayton in October 1998. The Quality Improvement Office was responsible for determining the subordinate, peer, and superior raters for each targeted leader and for distributing the surveys. These individuals were given oral and written instructions for completing the multi-rater assessment. Subsequent inquiries indicated that some bilingual civilian subordinate raters had difficulty with the instructions and the language used in the survey (particularly the reverse coded items, i.e., the undesirable behaviors). It should also be noted that surveys were completed in the context of a 100% drawdown, with most participants expecting to be working somewhere else by July of 1999. Surveys were completed by November 10<sup>th</sup> and mailed back to ARI for analysis.

Thirty seven commissioned and non-commissioned military officers and approximately 40 civilians completed the Leader Azimuth Check. Generally one superior, at least 2 peers and at least 2 subordinates (in some cases as many as seven peers and six subordinates) also completed the Azimuth for the targeted leader. This feedback was processed and interpreted in December 1998. Not all leaders were available for feedback interpretation (due to temporary duty travel, or recent change in duty station).

Finally, the Quality Improvement Office distributed a follow-up survey intended to assess perceptions about the multi-rater process. These were completed anonymously. The duration of time between feedback interpretation of Azimuth results and the follow-up survey varied. The follow-up was designed to assess 1) perceptions of trust and fairness in the multi-rater process, 2) understanding of the multi-rater process, 3) beliefs about the accuracy and appropriateness of the categorical source of feedback, and 4) self-efficacy and intentions for change in leadership behaviors. (See Appendix B). Due to holiday breaks and TDYs, the follow-up surveys were collected at varying times by the Quality Improvement Office. In January 1999, a total of 54 completed follow-up surveys were received and analyzed by ARI.

Targeted Leaders	Rank and Grade	Count
<b>Commissioned Officers</b>		
	Colonel	1
	LTC	7
	Major	9
	Captain	7
<b>Non-commissioned Officers</b>		
	Chief Warrant Officer 4	2
	Command Sergeant Major	3
	First Sergeant	8
<b>**Civilian Leaders range in grade level from GS9-GS14</b>		40

#### Interesting findings with Azimuth follow-up survey

Subordinates were overwhelmingly viewed as the most valuable source of feedback.

Responses in the follow-up survey indicate that subordinates feedback was the most valuable source of information. A higher percentage of targeted leaders (58%) viewed their subordinates as the most valuable source of information as compared to the 10% who believed superiors and 6% who believed peers were the most valuable source of information.

Subordinates were viewed as an appropriate source for information concerning leadership skills by 93% of the targeted leaders. Superiors were also viewed as appropriate source of information by 92%, however peer feedback was only deemed appropriate by 63% of respondents.

In terms of the accuracy of assessment, 82% believed their subordinates' feedback was an accurate reflection of their leadership. Eighty three percent also believed that their superiors feedback was accurate whereas, only 65% believed peer feedback was accurate.

These data can be interpreted in at least two ways. On the one hand, a number of people have questioned the appropriateness of a multi-rater assessment process within the military. This argument is that encouraging subordinates to assess their superiors may be detrimental to discipline and order. On the other hand, results suggest that at least within this organization, subordinate feedback is not a problem. However, we must remember that over half of the participants (and an unknown proportion of the follow-up respondents) were civilians.

A second interpretation drawn from these data is that positive responses to subordinate feedback (and the somewhat indifferent reception of feedback from other sources) is an accurate reflection of the structure of this organizational unit. Virtually all targeted leaders received assessments from one superior. In the feedback sessions, targeted leaders showed the least interest in superior's feedback; many said "no surprises there." Additionally, there were indications of inflated (non-informative) ratings from superiors compared to other sources. Perhaps targeted leaders are accustomed to mostly positive ratings from superiors, as anything else is unusual given the evaluative setting in which ratings are usually received. Targeted leaders also received input from at least two peers, however, many commented that their peers could not be and were not aware of their daily routines and behaviors due to the diversity in duties and locations. Thus, the input from subordinates, which is not usually readily available was received with the most interest.

#### Motivation to change leadership behaviors

Between 76% and 79% of respondents reported that participating in the 360 assessment has motivated them to re-examine/change their leadership behavior (depending on how the question was asked). Eighty-three percent report that they will use their feedback to monitor and develop their leadership. Most leaders (83%) felt that there were resources readily available to assist them in self-development. Eighty- three percent also felt capable of implementing the changes which the feedback indicated were necessary, and 83% reported that their current working climate allowed for self development.

Motivation to change was best predicted (using regression analyses) by the extent to which leaders believed the feedback they received was new information. Similarly, those who

deemed feedback to be valuable were more likely to be motivated to change. A third good predictor of motivation to change came from beliefs in one's own ability to implement change (self-efficacy). Finally, 96% of respondents reported understanding how the feedback could be used for further self-development.

#### Results concerning acceptance of 360

During feedback sessions most leaders seemed receptive and motivated to learn from the feedback. Analysis of the follow-up survey indicated that satisfaction with the multirater process was best predicted by perceptions of fairness, perceptions of accuracy in feedback and an understanding of methods used to collect and report feedback. As expected, there were positive correlations between perceptions of fairness and satisfaction and between perceptions that feedback was accurate and satisfaction. However, the direction of the relation between understanding and satisfaction was rather counterintuitive. We found that higher reported understanding of the multi-rater process was associated with less satisfaction with the 360 process. The particular process or aspect of assessment that led to the lower satisfaction for these individuals is unknown. Nonetheless, most respondents understood how a multi-rater system works and believed it to be fair.

- 76% agreed that 360's are a fair way to assess leadership
- 78% satisfied with 360 process
- 82% felt the concept of multi-rater assessments have potential for Army use
- 91% trusted the confidentiality of the process
- 94% understood the methods for gathering data and figuring averages
- 96% reported adequate knowledge of the 360 process, as a whole

Due to time constraints, we were not able to assist targeted leaders in developing actions plans, however most research indicates the importance of setting goals and following through in this manner. Leaders were advised to follow-up by reviewing their feedback, communicating with those who had provided feedback, and developing specific plans to improve identified developmental needs.

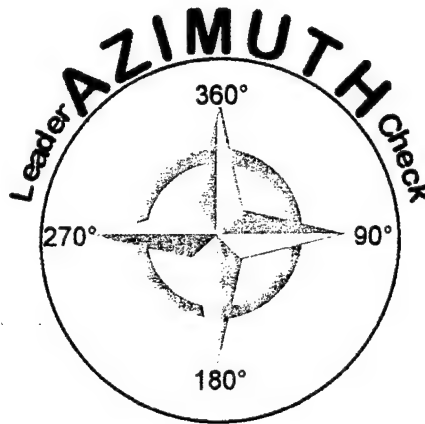
Ideally, a follow-up several months after the initial feedback is recommended. However, since leaders at Fort Clayton are also dealing with draw-down issues, this follow-up was not a viable option for many. Nevertheless, at least two officers requested materials for follow-up.



### Implications and Recommendations

The Theater Support Brigade took advantage of a tool that has the potential to initiate and optimize self-development. To leverage this self-development it is recommended that materials (perhaps a reading list) be made available to assist targeted leaders in achieving their developmental goals. Additionally, the chain of command should develop and monitor specific action plans. It is also strongly recommended that more information regarding the purpose and process of the multi-rater assessment be provided up front to all who participate in the process. Finally, all efforts to follow up are encouraged and assessments of the effectiveness of such a process should be conducted.

## Appendix A



Leader AZIMUTH Check:  
A Leader Self-Assessment Instrument

Fort Leavenworth Research Unit  
U.S. Army Research Institute

**PURPOSE:** This questionnaire has been designed by the U.S. Army Research Institute and the Center for Army Leadership to obtain information in support of leader self-development. The items in the questionnaire and the feedback based on the items are consistent with current and emerging Army Leadership Doctrine.

**CONFIDENTIALITY:** The individual ratings and the overall results are provided to the person who is being rated; the information is not provided to anyone in the officer's rating chain. If you are providing ratings on someone else, your input is anonymous.

## Introduction

The Army places special emphasis on self-development to enhance the leadership skills of military and civilian leaders. As part of self-development, it is important for individuals to become aware of their own strengths and weaknesses. You are asked to provide input on the strengths and weaknesses of the designated officer. AZIMUTH provides each person with feedback based on a comparison of their own self-perceptions and others' perceptions of them. This information is needed from you in order to provide complete and high quality information for the rated individuals. **YOUR VOLUNTARY PARTICIPATION IS NEEDED.** You are encouraged to answer all questions, but failure to respond to any item will not result in any penalty.

**The identification numbers and names on the AZIMUTH answer sheets are provided to identify the person being rated. When you are rating someone else your rating is ANONYMOUS; no record is kept of who rates whom.** However, if you do not respond to all the questions, then the person being assessed will receive incomplete feedback. If you are doing a self-assessment, rating yourself, you need to be aware that the self-assessment cannot be anonymous; we need to be able to identify you in order to provide you feedback. Only persons involved in collecting or preparing the information for analysis will have access to completed AZIMUTH forms. Any reports of these data will contain only group statistics.

## Instructions

If you are using this form for self-assessment: 1) Be sure to read and sign the Privacy Act Statement before proceeding. 2) Fill in your own name and ID number on all mark-sense response forms to be completed by yourself and others. 3) Complete one self form by marking the bubbles which best indicate how well each item describes you.

If you are rating someone else: The person being rated should have already filled in their name and ID number section. Please: 1) Skip the Privacy Act Statement section. 2) Fill in a bubble at the top of page 3 to indicate whether the person being rated is your peer, subordinate or superior. 3) Mark the bubbles which best indicate how well each item describes the person you are rating.

### PRIVACY ACT STATEMENT:

Public Law 93-573, called the Privacy Act of 1974, requires that you be informed of the purpose and uses to be made of any information collected.

The Department of the Army may collect the information requested in this questionnaire under the authority of 10 United States Code 137. Providing information in this questionnaire is voluntary. Failure to respond to any particular questions will not result in any penalty. However, if you are providing an assessment of yourself, then failure to provide your ID number will prevent you from receiving feedback for your leadership self-development.

The primary use of the information collected will be to provide the person being rated with feedback for his/her leadership self-development. The aggregate data will also be used by the U. S. Army Research Institute for research and development purposes. Your responses will be held in strict confidence. No responses or summaries, whole or in part, will become a part of any individual's personnel file. **This information will not be used by anyone for an evaluation of the person being assessed - it will be used to provide him/her with feedback for self-development.**

( If you are providing an assessment of someone else, then please **DO NOT** enter your name or signature.)

PRINT your name here: \_\_\_\_\_ Date: \_\_\_\_\_

I authorize use of this information as stated above:

\_\_\_\_\_  
(Sign Your Name Above)

Name of person being rated:

**MARK THIS ITEM FIRST**

The Person Being Rated  
is my:

- ☐ Self  
☐ Peer  
☐ Subordinate  
☐ Superior

**Identification Number**

0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

**MARKING INSTRUCTIONS**

- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt tip pens.
- Make solid marks that fill the response completely.
- Erase cleanly any marks you wish to change.
- Make no stray marks on this form.

CORRECT: ●

INCORRECT: ✗ ⊗ ⊙ ⊖

**In comparison with others I have known well, I think the items below describe the person being rated as indicated.**

**Communicating**

1. Does not provide clear direction.
2. Explains own ideas so that they are easily understood.
3. Keeps others well informed.
4. Listens well.
5. Tells it like it is.
6. Writes poorly.


**Decision Making**

7. Delays decisions unnecessarily.
8. Generates innovative solutions to unique problems.
9. Ignores information that conflicts with own initial assumptions.
10. Makes sound decisions in a timely manner.
11. Willing to revisit a decision when new information calls for it.


**Motivating**

12. Creates a supportive work environment.
13. Disciplines in a firm, fair, and consistent manner.
14. Inspires people to do their best.
15. Often acknowledges good performance of others.
16. Sets clear performance expectations.


**Developing**

17. Does not encourage professional growth.
18. Is an effective teacher.
19. Often uses counseling to provide performance feedback.
20. Provides opportunities to learn.
21. Seldom delegates authority.


**Building**

22. Actively participates in organizational/unit activities.
23. Encourages cooperation among team members.
24. Encourages organization/unit activities.
25. Focuses the organization/unit on mission accomplishment.
26. Treats others as valuable team members.


**Learning**

27. Becomes defensive when given critical feedback.
28. Encourages open discussion to improve the organization/unit.
29. Helps organization/unit adapt to changing circumstances.
30. Seems to be realistic about own personal limitations.
31. Willingly accepts new challenges.


**Planning and Organizing**

32. Anticipates how different plans will look when executed.
33. Develops effective plans to achieve organizational goals.
34. Leaves key events to chance.
35. Sets clear priorities.
36. Unwilling to modify original plan when circumstances change.


Have Not Observed  
Extremely Poor Description  
Very Poor Description  
Slightly Poor Description  
Slightly Good Description  
Very Good Description  
Extremely Good Description

- 37. Completes assigned missions to standard.
- 38. Does not meet mission timelines.
- 39. Does whatever is necessary (within ethical limits) to complete the mission.
- 40. Monitors execution of plans to identify problems.
- 41. Refines plans to exploit unforeseen opportunities.

42. Accurately assesses the organization/unit's strengths.  
43. Accurately assesses the organization/unit's weaknesses.  
44. Makes organizational changes for no apparent reason.  
45. Rarely conducts after-action reviews.  
46. Takes time to find out what subordinates are doing.

47. Actively supports equal opportunity for all persons.  
48. Creates a climate of fairness in the organization/unit.  
49. Excludes some from team activities.  
50. Treats others with respect.

51. Claims credit for others' work.
52. Considers the needs of own and others' family members.
53. Places the welfare of the organization before own personal gain.
54. Takes advantage of others to advance own career.
55. Takes privileges not allowed others.

- 56. Behaves with questionable ethics.
- 57. Demonstrates moral courage (does what is right).
- 58. Is not sensitive to the ethical impacts of decisions.
- 59. Is trustworthy.
- 60. Sets the proper ethical example for others.

61. Does not display extreme anger.
62. Exhibits wide mood swings.
63. Maintains calm disposition under stress.
64. Possesses an even temperament.
65. Seems to behave unpredictably.

66. Demonstrates appropriate soldier skills.
67. Is a clear thinker.
68. Is effective on the job.
69. Maintains effective interpersonal relations with others.
70. Physically fit for the job.
71. This person is a good leader
72. This person is someone I would follow into combat.

☐ Strongly Disagree    ☐ Disagree    ☐ Slightly Disagree    ☐ Slightly Agree    ☐ Agree    ☐ Strongly Agree

☐ Strongly Disagree    ☐ Disagree    ☐ Slightly Disagree    ☐ Slightly Agree    ☐ Agree    ☐ Strongly Agree

☐ Strongly Disagree    ☐ Disagree    ☐ Slightly Disagree    ☐ Slightly Agree    ☐ Agree    ☐ Strongly Agree

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## Appendix B

# The Leader AZIMUTH Check Follow-up Survey

## MARKING INSTRUCTIONS

- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt tip pens.
- Make solid marks that fill the response completely.
- Erase cleanly any marks you wish to change.

CORRECT: ● INCORRECT: ✓ X ● •

The purpose of this questionnaire is to obtain the participants' assessment of the multi-rater assessment process. Your responses to this survey are anonymous. Your responses are an important source of feedback for the Army 360 Assessment Initiative. Please rate the extent to which you agree or disagree with the following statements using the scale given at the right.

Strongly Disagree

Disagree

Agree

Strongly Agree

1. The multi-rater feedback process is a fair way to assess my leadership abilities.
2. I am satisfied with the multi-rater feedback process.
3. I trust the confidentiality of the multi-rater feedback process.
4. I believe the items in the Leader AZIMUTH Check addressed skills relevant to my job.
5. I believe that the feedback I received from my subordinates is accurate.
6. I believe that the feedback I received from my peers is accurate.
7. I believe that the feedback I received from my superiors is accurate.
8. I believe that my subordinates are an appropriate source of information concerning my leadership abilities.
9. I believe that my peers are an appropriate source of information concerning my leadership abilities.
10. I believe that my superiors are an appropriate source of information concerning my leadership abilities.
11. Participation in this feedback process has motivated me to re-examine my leadership skills.
12. I intend to use the feedback I received to monitor and develop any behaviors identified as developmental areas.
13. I believe that there are resources readily available to me to improve my leader skills.
14. I believe that I can implement the changes which my feedback indicates are necessary for becoming a better leader.
15. I believe that my working climate allows for the self-development of leadership behaviors.
16. I have an adequate knowledge and understanding of the multi-rater feedback process.
17. I understand how multi-rater feedback can be used for self-development.
18. I understand the methods used for gathering data and determining the scores in my feedback.

19. I feel..... about the multi-rater feedback I received . (Please mark all that apply.)

Good  
Bad

Angry  
Satisfied

Pleasantly Surprised  
Apprehensive

Other \_\_\_\_\_

Comments:



Please continue responding to the questions by marking the oval next to the response that most closely approximates your opinion.

20. The 360 report provided an accurate assessment of my leadership:
- Strongly Agree
  - Agree
  - Disagree
  - Strongly Disagree
21. The 360 Feedback Interpretation Booklet was :
- Very helpful - greatly contributed to my understanding of the 360 report.
  - Somewhat helpful - made some contribution to my understanding of the 360 report.
  - Not very helpful - did not contribute to my understanding of the 360 report.
  - No help at all - confused me in attempting to understand the 360 report.
  - I did not receive a booklet.
22. The source of 360 assessment feedback I valued the most was provided by:
- Superiors.
  - Peers.
  - Subordinates.
  - all ratings were equally valued.
  - not able to compare (only had results from one source).
23. The information I received from the 360 Assessment report was:
- A great deal of new information about my leadership.
  - Some new information about my leadership.
  - A few interesting findings, but little new information about my leadership.
  - Nothing that I did not already know about my leadership
24. The information I received from the 360 Assessment report was:
- Extremely valuable.
  - Valuable.
  - Of limited use.
  - Of no use.
25. To what extent does the 360 Assessment Report motivate you to change your behavior?
- Provides a great deal of motivation to change my leadership behavior.
  - Provides some motivation to change my leadership behavior.
  - Provides no motivation to change my leadership behavior.
  - The 360 assessment did not indicate that I should change my leadership behavior.
26. Aside from any administrative problems, the concept of 360 has:
- no potential for the Army.
  - limited potential for the Army.
  - some potential for the Army.
  - great potential for the Army.

Thank you for completing this survey.

## Appendix C

# **Panama data - Perceptions of Multi-rater Process** **Means, Standard deviations, and range**

## **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
RFAIR	54	1.00	4.00	2.7593	.5807
RSATIS	54	1.00	4.00	2.7407	.5887
RTRUST	53	1.00	4.00	3.1321	.6213
RRELEV	54	1.00	4.00	3.0000	.7004
RSUBACC	54	1.00	4.00	2.8889	.6344
RPACC	54	1.00	4.00	2.6296	.7083
RSUPACC	53	1.00	4.00	2.9811	.6931
RSUBAPP	54	1.00	4.00	3.2037	.6835
peer appropriate	54	1.00	4.00	2.6852	.7968
superior appropriate source	52	1.00	4.00	3.1538	.6066
motivated to re-examine	54	1.00	4.00	2.8333	.6659
use fdbk to monitor	54	1.00	4.00	2.9259	.6399
resources readily available	54	1.00	4.00	3.0000	.5828
can implement change	54	1.00	4.00	2.9630	.6132
working climate allows change	54	1.00	4.00	3.0000	.6443
adequate knowledge of process	54	2.00	4.00	3.1481	.4517
fdbk can be used for self-devel	53	2.00	4.00	3.1698	.4697
understand methods for data collection..	53	2.00	4.00	3.0566	.4121
accurate assess. of leader skills	53	.00	3.00	1.6415	.6532
info l rcvd was new	54	.00	3.00	1.4815	.7201
info rcvd was valuable	54	.00	3.00	1.7222	.5961
360 motivate to change	54	.00	3.00	1.7593	.6711
potential of 360 for army	54	.00	3.00	1.0185	.7646
Valid N (listwise)	48				

# Correlations

		RFAIR	RSATIS	RTRUST	RRELEV	RSUBACC
RFAIR	Pearson Correlation	1.000	.752**	.197	.557**	.336*
	Sig. (2-tailed)	.	.000	.158	.000	.013
	N	54	54	53	54	54
RSATIS	Pearson Correlation	.752**	1.000	.149	.503**	.578**
	Sig. (2-tailed)	.000	.	.288	.000	.000
	N	54	54	53	54	54
RTRUST	Pearson Correlation	.197	.149	1.000	.408**	.183
	Sig. (2-tailed)	.158	.288	.	.002	.189
	N	53	53	53	53	53
RRELEV	Pearson Correlation	.557**	.503**	.408**	1.000	.340*
	Sig. (2-tailed)	.000	.000	.002	.	.012
	N	54	54	53	54	54
RSUBACC	Pearson Correlation	.336*	.578**	.183	.340*	1.000
	Sig. (2-tailed)	.013	.000	.189	.012	.
	N	54	54	53	54	54
RPACC	Pearson Correlation	.513**	.399**	-.016	.304*	-.009
	Sig. (2-tailed)	.000	.003	.912	.025	.947
	N	54	54	53	54	54
RSUPACC	Pearson Correlation	.178	.081	.365**	.275*	.038
	Sig. (2-tailed)	.202	.563	.008	.047	.785
	N	53	53	52	53	53
RSUBAPP	Pearson Correlation	.459**	.556**	.384**	.552**	.532**
	Sig. (2-tailed)	.000	.000	.005	.000	.000
	N	54	54	53	54	54
peer appropriate	Pearson Correlation	.363**	.506**	.318*	.338*	.265
	Sig. (2-tailed)	.007	.000	.020	.012	.052
	N	54	54	53	54	54
superior appropriate source	Pearson Correlation	.438**	.387**	.511**	.515**	.346*
	Sig. (2-tailed)	.001	.005	.000	.000	.012
	N	52	52	52	52	52
motivated to re-examine	Pearson Correlation	.236	.225	.101	.243	-.134
	Sig. (2-tailed)	.086	.103	.473	.077	.334
	N	54	54	53	54	54
use fdbk to monitor	Pearson Correlation	.459**	.399**	.217	.421**	.026
	Sig. (2-tailed)	.000	.003	.119	.002	.853
	N	54	54	53	54	54
resources readily available	Pearson Correlation	.279*	.330*	.421**	.416**	.357**
	Sig. (2-tailed)	.041	.015	.002	.002	.008
	N	54	54	53	54	54
can implement change	Pearson Correlation	.345*	.443**	.413**	.527**	.135
	Sig. (2-tailed)	.011	.001	.002	.000	.331
	N	54	54	53	54	54
working climate allows change	Pearson Correlation	.101	.199	.238	.167	.277*
	Sig. (2-tailed)	.468	.149	.086	.227	.043
	N	54	54	53	54	54
adequate knowledge of process	Pearson Correlation	-.077	-.137	.146	.179	-.073
	Sig. (2-tailed)	.579	.325	.297	.196	.599
	N	54	54	53	54	54

# Correlations

		RFAIR	RSATIS	RTRUST	RRELEV	RSUBACC
fdbk can be used for self-devel	Pearson Correlation	.216	.154	.131	.463**	.065
	Sig. (2-tailed)	.121	.270	.355	.000	.643
	N	53	53	52	53	53
understand methods for data collection..	Pearson Correlation	-.017	-.174	.050	.071	-.194
	Sig. (2-tailed)	.902	.214	.724	.613	.164
	N	53	53	52	53	53
accurate assess. of leader skills	Pearson Correlation	.671**	.772**	.169	.541**	.385**
	Sig. (2-tailed)	.000	.000	.231	.000	.004
	N	53	53	52	53	53
info l rcvd was new	Pearson Correlation	.147	.211	-.019	.150	.037
	Sig. (2-tailed)	.289	.126	.895	.280	.792
	N	54	54	53	54	54
info rcvd was valuable	Pearson Correlation	.457**	.490**	.205	.497**	.017
	Sig. (2-tailed)	.001	.000	.141	.000	.905
	N	54	54	53	54	54
360 motivate to change	Pearson Correlation	.284*	.317*	.170	.161	.113
	Sig. (2-tailed)	.037	.020	.224	.246	.415
	N	54	54	53	54	54
potential of 360 for army	Pearson Correlation	-.542**	-.660**	-.296*	-.564**	-.385**
	Sig. (2-tailed)	.000	.000	.031	.000	.004
	N	54	54	53	54	54

# Correlations

		RPACC	RSUPACC	RSUBAPP	peer appropriate	superior appropriate source
RFAIR	Pearson Correlation	.513**	.178	.459**	.363**	.438**
	Sig. (2-tailed)	.000	.202	.000	.007	.001
	N	54	53	54	54	52
RSATIS	Pearson Correlation	.399**	.081	.556**	.506**	.387**
	Sig. (2-tailed)	.003	.563	.000	.000	.005
	N	54	53	54	54	52
RTRUST	Pearson Correlation	-.016	.365**	.384**	.318*	.511**
	Sig. (2-tailed)	.912	.008	.005	.020	.000
	N	53	52	53	53	52
RRELEV	Pearson Correlation	.304*	.275*	.552**	.338*	.515**
	Sig. (2-tailed)	.025	.047	.000	.012	.000
	N	54	53	54	54	52
RSUBACC	Pearson Correlation	-.009	.038	.532**	.265	.346*
	Sig. (2-tailed)	.947	.785	.000	.052	.012
	N	54	53	54	54	52
RPACC	Pearson Correlation	1.000	.141	.159	.592**	.228
	Sig. (2-tailed)	.	.314	.251	.000	.103
	N	54	53	54	54	52
RSUPACC	Pearson Correlation	.141	1.000	.129	.127	.424**
	Sig. (2-tailed)	.314	.	.357	.364	.002
	N	53	53	53	53	51
RSUBAPP	Pearson Correlation	.159	.129	1.000	.432**	.492**
	Sig. (2-tailed)	.251	.357	.	.001	.000
	N	54	53	54	54	52
peer appropriate	Pearson Correlation	.592**	.127	.432**	1.000	.523**
	Sig. (2-tailed)	.000	.364	.001	.	.000
	N	54	53	54	54	52
superior appropriate source	Pearson Correlation	.228	.424**	.492**	.523**	1.000
	Sig. (2-tailed)	.103	.002	.000	.000	.
	N	52	51	52	52	52
motivated to re-examine	Pearson Correlation	.307*	.199	.325*	.255	.066
	Sig. (2-tailed)	.024	.152	.017	.063	.642
	N	54	53	54	54	52
use fdbk to monitor	Pearson Correlation	.230	.169	.337*	.175	.179
	Sig. (2-tailed)	.095	.228	.013	.205	.204
	N	54	53	54	54	52
resources readily available	Pearson Correlation	.183	.094	.379**	.406**	.345*
	Sig. (2-tailed)	.186	.502	.005	.002	.012
	N	54	53	54	54	52
can implement change	Pearson Correlation	.185	.312*	.288*	.207	.378**
	Sig. (2-tailed)	.180	.023	.034	.132	.006
	N	54	53	54	54	52
working climate allows change	Pearson Correlation	-.041	.341*	.129	.184	.260
	Sig. (2-tailed)	.767	.012	.354	.183	.063
	N	54	53	54	54	52
adequate knowledge of process	Pearson Correlation	.116	.009	-.038	.237	.233
	Sig. (2-tailed)	.405	.948	.782	.085	.097
	N	54	53	54	54	52

### Correlations

		RPACC	RSUPACC	RSUBAPP	peer appropriate	superior appropriate source
fdbk can be used for self-devel	Pearson Correlation	.244	.081	.242	.242	.152
	Sig. (2-tailed)	.078	.566	.080	.081	.288
	N	53	52	53	53	51
understand methods for data collection..	Pearson Correlation	.284*	.146	.030	.120	.144
	Sig. (2-tailed)	.039	.303	.833	.391	.312
	N	53	52	53	53	51
accurate assess. of leader skills	Pearson Correlation	.381**	.261	.510**	.483**	.394**
	Sig. (2-tailed)	.005	.062	.000	.000	.004
	N	53	52	53	53	51
info l rcvd was new	Pearson Correlation	.171	.058	.180	.171	-.038
	Sig. (2-tailed)	.216	.680	.192	.218	.791
	N	54	53	54	54	52
info rcvd was valuable	Pearson Correlation	.333*	.310*	.373**	.329*	.230
	Sig. (2-tailed)	.014	.024	.005	.015	.101
	N	54	53	54	54	52
360 motivate to change	Pearson Correlation	.325*	.158	.150	.244	.095
	Sig. (2-tailed)	.017	.258	.279	.076	.504
	N	54	53	54	54	52
potential of 360 for army	Pearson Correlation	-.335*	-.183	-.585**	-.486**	-.477**
	Sig. (2-tailed)	.013	.191	.000	.000	.000
	N	54	53	54	54	52

# Correlations

		motivated to re-examine	use fdbk to monitor	resources readily available	can implement change
RFAIR	Pearson Correlation	.236	.459**	.279*	.345*
	Sig. (2-tailed)	.086	.000	.041	.011
	N	54	54	54	54
RSATIS	Pearson Correlation	.225	.399**	.330*	.443**
	Sig. (2-tailed)	.103	.003	.015	.001
	N	54	54	54	54
RTRUST	Pearson Correlation	.101	.217	.421**	.413**
	Sig. (2-tailed)	.473	.119	.002	.002
	N	53	53	53	53
RRELEV	Pearson Correlation	.243	.421**	.416**	.527**
	Sig. (2-tailed)	.077	.002	.002	.000
	N	54	54	54	54
RSUBACC	Pearson Correlation	-.134	.026	.357**	.135
	Sig. (2-tailed)	.334	.853	.008	.331
	N	54	54	54	54
RPACC	Pearson Correlation	.307*	.230	.183	.185
	Sig. (2-tailed)	.024	.095	.186	.180
	N	54	54	54	54
RSUPACC	Pearson Correlation	.199	.169	.094	.312*
	Sig. (2-tailed)	.152	.228	.502	.023
	N	53	53	53	53
RSUBAPP	Pearson Correlation	.325*	.337*	.379**	.288*
	Sig. (2-tailed)	.017	.013	.005	.034
	N	54	54	54	54
peer appropriate	Pearson Correlation	.255	.175	.406**	.207
	Sig. (2-tailed)	.063	.205	.002	.132
	N	54	54	54	54
superior appropriate source	Pearson Correlation	.066	.179	.345*	.378**
	Sig. (2-tailed)	.642	.204	.012	.006
	N	52	52	52	52
motivated to re-examine	Pearson Correlation	1.000	.635**	.097	.447**
	Sig. (2-tailed)	.	.000	.484	.001
	N	54	54	54	54
use fdbk to monitor	Pearson Correlation	.635**	1.000	.354**	.714**
	Sig. (2-tailed)	.000	.	.009	.000
	N	54	54	54	54
resources readily available	Pearson Correlation	.097	.354**	1.000	.528**
	Sig. (2-tailed)	.484	.009	.	.000
	N	54	54	54	54
can implement change	Pearson Correlation	.447**	.714**	.528**	1.000
	Sig. (2-tailed)	.001	.000	.000	.
	N	54	54	54	54
working climate allows change	Pearson Correlation	-.088	.183	.402**	.239
	Sig. (2-tailed)	.527	.185	.003	.082
	N	54	54	54	54
adequate knowledge of process	Pearson Correlation	-.042	-.092	.072	-.048
	Sig. (2-tailed)	.764	.509	.607	.731
	N	54	54	54	54



# Correlations

		motivated to re-examine	use fdbk to monitor	resources readily available	can implement change
fdbk can be used for self-devel	Pearson Correlation	.342*	.163	.059	.147
	Sig. (2-tailed)	.012	.243	.672	.293
	N	53	53	53	53
understand methods for data collection..	Pearson Correlation	.035	-.128	.005	-.142
	Sig. (2-tailed)	.801	.363	.974	.311
	N	53	53	53	53
accurate assess. of leader skills	Pearson Correlation	.184	.345*	.250	.394**
	Sig. (2-tailed)	.188	.011	.071	.004
	N	53	53	53	53
info l rcvd was new	Pearson Correlation	.446**	.284*	.180	.212
	Sig. (2-tailed)	.001	.038	.193	.124
	N	54	54	54	54
info rcvd was valuable	Pearson Correlation	.547**	.588**	.163	.488**
	Sig. (2-tailed)	.000	.000	.239	.000
	N	54	54	54	54
360 motivate to change	Pearson Correlation	.289*	.309*	.289*	.482**
	Sig. (2-tailed)	.034	.023	.034	.000
	N	54	54	54	54
potential of 360 for army	Pearson Correlation	-.327*	-.306*	-.254	-.401**
	Sig. (2-tailed)	.016	.025	.064	.003
	N	54	54	54	54

# Correlations

		working climate allows change	adequate knowledge of process	fdbk can be used for self-devel	understand methods for data collection..
RFAIR	Pearson Correlation	.101	-.077	.216	-.017
	Sig. (2-tailed)	.468	.579	.121	.902
	N	54	54	53	53
RSATIS	Pearson Correlation	.199	-.137	.154	-.174
	Sig. (2-tailed)	.149	.325	.270	.214
	N	54	54	53	53
RTRUST	Pearson Correlation	.238	.146	.131	.050
	Sig. (2-tailed)	.086	.297	.355	.724
	N	53	53	52	52
RRELEV	Pearson Correlation	.167	.179	.463**	.071
	Sig. (2-tailed)	.227	.196	.000	.613
	N	54	54	53	53
RSUBACC	Pearson Correlation	.277*	-.073	.065	-.194
	Sig. (2-tailed)	.043	.599	.643	.164
	N	54	54	53	53
RPACC	Pearson Correlation	-.041	.116	.244	.284*
	Sig. (2-tailed)	.767	.405	.078	.039
	N	54	54	53	53
RSUPACC	Pearson Correlation	.341*	.009	.081	.146
	Sig. (2-tailed)	.012	.948	.566	.303
	N	53	53	52	52
RSUBAPP	Pearson Correlation	.129	-.038	.242	.030
	Sig. (2-tailed)	.354	.782	.080	.833
	N	54	54	53	53
peer appropriate	Pearson Correlation	.184	.237	.242	.120
	Sig. (2-tailed)	.183	.085	.081	.391
	N	54	54	53	53
superior appropriate source	Pearson Correlation	.260	.233	.152	.144
	Sig. (2-tailed)	.063	.097	.288	.312
	N	52	52	51	51
motivated to re-examine	Pearson Correlation	-.088	-.042	.342*	.035
	Sig. (2-tailed)	.527	.764	.012	.801
	N	54	54	53	53
use fdbk to monitor	Pearson Correlation	.183	-.092	.163	-.128
	Sig. (2-tailed)	.185	.509	.243	.363
	N	54	54	53	53
resources readily available	Pearson Correlation	.402**	.072	.059	.005
	Sig. (2-tailed)	.003	.607	.672	.974
	N	54	54	53	53
can implement change	Pearson Correlation	.239	-.048	.147	-.142
	Sig. (2-tailed)	.082	.731	.293	.311
	N	54	54	53	53
working climate allows change	Pearson Correlation	1.000	.000	-.118	-.069
	Sig. (2-tailed)	.	1.000	.400	.622
	N	54	54	53	53
adequate knowledge of process	Pearson Correlation	.000	1.000	.634**	.488**
	Sig. (2-tailed)	1.000	.	.000	.000
	N	54	54	53	53

### Correlations

		working climate allows change	adequate knowledge of process	fdbk can be used for self-devel	understand methods for data collection..
fdbk can be used for self-devel	Pearson Correlation	-.118	.634**	1.000	.508**
	Sig. (2-tailed)	.400	.000	.	.000
	N	53	53	53	52
understand methods for data collection..	Pearson Correlation	-.069	.488**	.508**	1.000
	Sig. (2-tailed)	.622	.000	.000	.
	N	53	53	52	53
accurate assess. of leader skills	Pearson Correlation	.226	-.191	.099	.007
	Sig. (2-tailed)	.103	.170	.486	.961
	N	53	53	52	52
info l rcvd was new	Pearson Correlation	.000	-.049	.142	.034
	Sig. (2-tailed)	1.000	.723	.311	.809
	N	54	54	53	53
info rcvd was valuable	Pearson Correlation	.147	-.054	.302*	.066
	Sig. (2-tailed)	.288	.696	.028	.639
	N	54	54	53	53
360 motivate to change	Pearson Correlation	.131	-.316*	-.120	-.087
	Sig. (2-tailed)	.345	.020	.392	.535
	N	54	54	53	53
potential of 360 for army	Pearson Correlation	-.230	-.172	-.380**	-.068
	Sig. (2-tailed)	.095	.214	.005	.626
	N	54	54	53	53

# Correlations

		accurate assess. of leader skills	info l rcvd was new	info rcvd was valuable
RFAIR	Pearson Correlation	.671**	.147	.457**
	Sig. (2-tailed)	.000	.289	.001
	N	53	54	54
RSATIS	Pearson Correlation	.772**	.211	.490**
	Sig. (2-tailed)	.000	.126	.000
	N	53	54	54
RTRUST	Pearson Correlation	.169	-.019	.205
	Sig. (2-tailed)	.231	.895	.141
	N	52	53	53
RRELEV	Pearson Correlation	.541**	.150	.497**
	Sig. (2-tailed)	.000	.280	.000
	N	53	54	54
RSUBACC	Pearson Correlation	.385**	.037	.017
	Sig. (2-tailed)	.004	.792	.905
	N	53	54	54
RPACC	Pearson Correlation	.381**	.171	.333*
	Sig. (2-tailed)	.005	.216	.014
	N	53	54	54
RSUPACC	Pearson Correlation	.261	.058	.310*
	Sig. (2-tailed)	.062	.680	.024
	N	52	53	53
RSUBAPP	Pearson Correlation	.510**	.180	.373**
	Sig. (2-tailed)	.000	.192	.005
	N	53	54	54
peer appropriate	Pearson Correlation	.483**	.171	.329*
	Sig. (2-tailed)	.000	.218	.015
	N	53	54	54
superior appropriate source	Pearson Correlation	.394**	-.038	.230
	Sig. (2-tailed)	.004	.791	.101
	N	51	52	52
motivated to re-examine	Pearson Correlation	.184	.446**	.547**
	Sig. (2-tailed)	.188	.001	.000
	N	53	54	54
use fdbk to monitor	Pearson Correlation	.345*	.284*	.588**
	Sig. (2-tailed)	.011	.038	.000
	N	53	54	54
resources readily available	Pearson Correlation	.250	.180	.163
	Sig. (2-tailed)	.071	.193	.239
	N	53	54	54
can implement change	Pearson Correlation	.394**	.212	.488**
	Sig. (2-tailed)	.004	.124	.000
	N	53	54	54
working climate allows change	Pearson Correlation	.226	.000	.147
	Sig. (2-tailed)	.103	1.000	.288
	N	53	54	54
adequate knowledge of process	Pearson Correlation	-.191	-.049	-.054
	Sig. (2-tailed)	.170	.723	.696
	N	53	54	54

### Correlations

		accurate assess. of leader skills	info l rcvd was new	info rcvd was valuable
fdbk can be used for self-devel	Pearson Correlation	.099	.142	.302*
	Sig. (2-tailed)	.486	.311	.028
	N	52	53	53
understand methods for data collection..	Pearson Correlation	.007	.034	.066
	Sig. (2-tailed)	.961	.809	.639
	N	52	53	53
accurate assess. of leader skills	Pearson Correlation	1.000	.094	.495**
	Sig. (2-tailed)	.	.501	.000
	N	53	53	53
info l rcvd was new	Pearson Correlation	.094	1.000	.361**
	Sig. (2-tailed)	.501	.	.007
	N	53	54	54
info rcvd was valuable	Pearson Correlation	.495**	.361**	1.000
	Sig. (2-tailed)	.000	.007	.
	N	53	54	54
360 motivate to change	Pearson Correlation	.276*	.479**	.254
	Sig. (2-tailed)	.046	.000	.064
	N	53	54	54
potential of 360 for army	Pearson Correlation	-.543**	-.051	-.485**
	Sig. (2-tailed)	.000	.715	.000
	N	53	54	54

# Correlations

		360 motivate to change	potential of 360 for army
RFAIR	Pearson Correlation	.284*	-.542**
	Sig. (2-tailed)	.037	.000
	N	54	54
RSATIS	Pearson Correlation	.317*	-.660**
	Sig. (2-tailed)	.020	.000
	N	54	54
RTRUST	Pearson Correlation	.170	-.296*
	Sig. (2-tailed)	.224	.031
	N	53	53
RRELEV	Pearson Correlation	.161	-.564**
	Sig. (2-tailed)	.246	.000
	N	54	54
RSUBACC	Pearson Correlation	.113	-.385**
	Sig. (2-tailed)	.415	.004
	N	54	54
RPACC	Pearson Correlation	.325*	-.335*
	Sig. (2-tailed)	.017	.013
	N	54	54
RSUPACC	Pearson Correlation	.158	-.183
	Sig. (2-tailed)	.258	.191
	N	53	53
RSUBAPP	Pearson Correlation	.150	-.585**
	Sig. (2-tailed)	.279	.000
	N	54	54
peer appropriate	Pearson Correlation	.244	-.486**
	Sig. (2-tailed)	.076	.000
	N	54	54
superior appropriate source	Pearson Correlation	.095	-.477**
	Sig. (2-tailed)	.504	.000
	N	52	52
motivated to re-examine	Pearson Correlation	.289*	-.327*
	Sig. (2-tailed)	.034	.016
	N	54	54
use fdbk to monitor	Pearson Correlation	.309*	-.306*
	Sig. (2-tailed)	.023	.025
	N	54	54
resources readily available	Pearson Correlation	.289*	-.254
	Sig. (2-tailed)	.034	.064
	N	54	54
can implement change	Pearson Correlation	.482**	-.401**
	Sig. (2-tailed)	.000	.003
	N	54	54
working climate allows change	Pearson Correlation	.131	-.230
	Sig. (2-tailed)	.345	.095
	N	54	54
adequate knowledge of process	Pearson Correlation	-.316*	-.172
	Sig. (2-tailed)	.020	.214
	N	54	54

### Correlations

		360 motivate to change	potential of 360 for army
fdbk can be used for self-devel	Pearson Correlation	-.120	-.380**
	Sig. (2-tailed)	.392	.005
	N	53	53
understand methods for data collection..	Pearson Correlation	-.087	-.068
	Sig. (2-tailed)	.535	.626
	N	53	53
accurate assess. of leader skills	Pearson Correlation	.276*	-.543**
	Sig. (2-tailed)	.046	.000
	N	53	53
info l rcvd was new	Pearson Correlation	.479**	-.051
	Sig. (2-tailed)	.000	.715
	N	54	54
info rcvd was valuable	Pearson Correlation	.254	-.485**
	Sig. (2-tailed)	.064	.000
	N	54	54
360 motivate to change	Pearson Correlation	1.000	-.065
	Sig. (2-tailed)	.	.642
	N	54	54
potential of 360 for army	Pearson Correlation	-.065	1.000
	Sig. (2-tailed)	.642	.
	N	54	54

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

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at Fort Leavenworth. Dr. Stanly Halpin, Chief